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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/665,055

09/16/2003

Yan Chang

GLYO-P02-007

5479

28120

7590

10/19/2006

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EXAMINER

WHITE, EVERETT NMN

ART UNIT

PAPER NUMBER

1623

DATE MAILED: 10/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/665,055

Applicant(s)

CHANG ET AL.

Examiner

Everett White

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23,27-45,47 and 48 is/are pending in the application.
- 4a) Of the above claim(s) 23 and 27-43 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22,44,45,47 and 48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed July 11, 2006 has been received, entered and carefully considered. The amendment affects the instant application accordingly:

- (A) Claims 24-26 and 46 were previously canceled;
- (B) Claims 17, 23 and 27 have been amended;
- (C) Comments regarding Office Action have been provided drawn to:
 - (I) 112, 2nd paragraph rejection, which has been maintained for the reasons of record;
 - (II) 112, 1st paragraph rejection, which has been maintained for the reasons of record;
 - (III) 102(b) rejection, which has been maintained for the reasons of record.

2. Claims 1-23 and 27-45, 47 and 48 are pending in the case. Claims 23 and 27-43 are withdrawn from consideration as being directed to non-elected inventions.

Election By Original Presentation

3. Claims 23 and 27-43, submitted May 9, 2005, are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

The originally claimed inventions, which are directed to a method for inhibiting angiogenesis and the said submitted claims which are directed to methods for treating various disease conditions which are specifically set forth in Claims 23, 27-31 and 33-43 are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions obviously have different modes of operation, different functions, and different effects.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, Claims 23 and 27-43 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

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4. Applicant's arguments filed October 25, 2005 have been fully considered but they are not persuasive. Applicants argue that no more than a reasonable number of species are claimed. This argument is not persuasive since the submitted claims (Claims 23 and 27-43) are not drawn to a method of inhibiting angiogenesis in an organism as originally set forth in Claim 1 and there is no indication in the claims that the specific conditions recited in the submitted claims are species of a method of inhibiting angiogenesis. Claim 17 does not disclose the treatment of a specific condition.

Claim Rejections - 35 USC § 112, 2nd Paragraph

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 17-22 and 48 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention for the reasons set forth on page 3 of the Office Action mailed July 25, 2005.

7. Applicant's arguments filed July 11, 2006 have been fully considered but they are not persuasive. Applicants argue that the art is sufficiently clear to one skilled in the art of what disease conditions are dependent on neovascularization. This argument is not persuasive since neovascularization is not targeted to specific diseases and even may be confusing since neovascularization is not necessarily related to a disease. The claims should give a more detailed description of the disease that is being treated or recite a specific disease in order to avoid confusion. Accordingly, the rejection of Claims 17-22 and 48 under 35 U.S.C. 112, second paragraph, is maintained for the reasons of record.

Claim Rejections - 35 USC § 112, 1st Paragraph

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

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art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 17-22 and 48 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Claim 17 has been amended to recite that the "disease condition thereof is not a cancer." However, no support is noted in the instant specification for this statement, which suggests that the statement is "new matter" and renders Claim 17 improper for not being in compliance with the first paragraph of 35 U.S.C. 112. Claims 18-22 and 48 are also rejected since these claims are dependent from Claim 17 and do not correct this error set forth in Claim 17.

10. Applicant's arguments filed July 11, 2006 have been fully considered but they are not persuasive. Applicants argue that even if the words "not a cancer" did not appear in the specification, one skilled in the art reading the specification is easily able to discern which of the described diseases are "not a cancer". This argument is not persuasive since claims must, under modern claim practice, stand alone to define the invention, and incorporation into claims by express reference to the specification and/or drawings is not permitted except in very limited circumstances (see 27 USPQ 2D 1608, BdPatApp & Inter. 1993). The phrase "which disease condition is not a cancer" gives the impression that the instant specification is limited to diseases that are not cancerous, which is not the case or is not supported in the instant specification. Accordingly, the rejection of Claims 17-22 and 48 under 35 U.S.C. 112, first paragraph, is maintained for the reasons of record.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims

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are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-22, 44, 47 and 48 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over Claims 1-14 and 16-26 of U.S. Patent No. 6,890,906 ('906 patent). Although the conflicting claims are not identical, they are not patentably distinct from each other because both documents set forth claims drawn to methods that involves administering to an organism a therapeutically effective amount of a compound which binds to galectin, wherein the compound comprises a polymeric backbone which is a partially demethoxylated polygalacturonic acid interrupted with rhamnose residues, wherein the molecular weight of the demethoxylated polygalacturonic acid interrupted with rhamnose residues disclosed in both documents overlaps. The inventions differ only in the preamble of the claims wherein the instant claims disclose a method for inhibiting angiogenesis in an organism and the claims of US Pat. No. 6,890,906 are drawn to a method for controlling angiogenesis in an organism. This difference in the claims is insufficient to overcome an obviousness rejection of the claims since both documents disclose the administration of identical compounds to treat an identical problem, angiogenesis in an organism.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of Applicants invention having the '906 patent before him use a demethoxylated polygalacturonic acid interrupted with rhamnose residues to treat angiogenesis in view

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of their closely related structures of the compounds, similar molecular weights and the resulting expectation of similar angiogenic treating properties.

11. Applicant's arguments with respect to Claims 1-22, 44, 47 and 48 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

12. Claims 17-22 and 48 stand rejected under 35 U.S.C. 102(b) as being anticipated by Raz et al (US Patent No. 5,895,784) for the reasons set forth on pages 3 and 4 of the Office Action mailed July 25, 2005.

13. Applicant's arguments filed July 11, 2006 have been fully considered but they are not persuasive. Applicants amended Claim 17 to exclude cancer as a disease condition. However, the rejection is maintained since this amendment to Claim 17 sets forth "new matter" as explained above in the rejection under 35 U.S.C. 112, first paragraph.

Summary

14. Claims 1-22, 44, 45, 47 and 48 are rejected; and Claims 23 and 27-43 are withdrawn from consideration.

Examiner's Telephone Number, Fax Number, and Other Information

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Everett White whose telephone number is 571-272-0660. The examiner can normally be reached on 9:30 to 6:00.

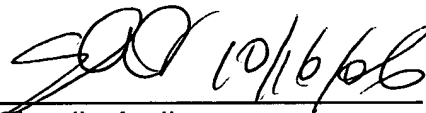
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shaojia A. Jiang can be reached on 571-272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



E. White



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